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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,862	11/05/2001	Anne-Marie Kermarrec	MS171124.1/40062.163US01	5999

7590 05/13/2008

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EXAMINER	
REFAI, RAMSEY	

ART UNIT	PAPER NUMBER
3627	

MAIL DATE	DELIVERY MODE
05/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/992,862	KERMARREC ET AL.	
	Examiner	Art Unit	
	RAMSEY REFAI	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 20-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 20-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Responsive to Request for Continued Examination filed 02/13/08. Claims 1, 4, 20, 22, 24, 26 have been amended. Claims 1-7 and 20-26 remain pending further examination.

Response to Arguments

1. Applicant's arguments have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues in substance:

Argument A: *The Amendment to claims 20-23 overcome the 101 non-statutory rejection.*

In response, the Examiner respectfully disagrees. During examination, the claims must be interpreted as broadly as their terms reasonably allow. The term "component" is not defined in the Applicant's specification as statutory subject matter. In fact, the term is not defined at all and is the subject of the below 112 1st rejection for being new matter. Since there is no novel meaning, the "plain meaning" must be given (see MPEP 2111.01). Merriam-Webster defines the term as "*a constituent part*". Therefore, the use of the term in the claims merely suggest a system with constituent parts, which are not limited to statutory matter.

Argument B: *Applicant argues that the claim language "two or more but less than all" is supported by "fewer nodes as compared to the overall number of nodes".*

In response, the Examiner respectfully disagrees. The cited portion of the specification fails to support the limitation "two or more but less than all". The term "fewer nodes" can not be concluded as providing clear support for the term "two or more". The specification therefore fails to describe the partial view as identifying two or more nodes. Therefore the rejection is maintained.

Argument C: *Caram fails to teach the use of partial view of the network for disseminating messages between nodes.*

In response, the Examiner respectfully disagrees. Caram teach that each node contains a dynamically formulated routing table of neighboring nodes, which is a portion of the network nodes. The table is used when disseminating messages. (see **column 2, lines 24-33 column 3, lines 29-42**).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 20-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a system of *components.* The term "component" is not defined in the Applicant's specification as statutory subject matter. In fact, the term is not defined at all and is the subject of the below 112 1st rejection for being new matter. Since there is no novel meaning, the "plain meaning" must be given (see MPEP 2111.01). Merriam-Webster defines the term as "*a constituent part*". Therefore, the use of the term in the claims merely suggests a system with constituent parts, which are not limited to statutory subject matter.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 1-7, and 20-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 20, and 24 have been amended to include the limitations "*the nodes are connected by one or more types of computer system relationships*" and "*two or more but less than all*" which is not supported by the Applicant's specification. Citations of the specific portions of the specification that support these limitations as well as explanation of those citations are respectfully solicited.

Claims 2-7 and 21-23 depend on claims 1 and 20 and are therefore rejected under the same rationale.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, and 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Caram (US Patent No. 5,245,607).

8. As per claim 1, Caram teaches a method of disseminating information to a plurality of nodes, the nodes connected in a network environment, said method comprising:

receiving, at a given node, a disseminated message, the message having broadcast-type information **(column 1, lines 15-16, column 2, lines 26-27)** and

for the given node, sending the message to a plurality of other nodes identified in a partial view, wherein the partial view is specific to the given node and resides locally to the given node and identifies any two or more but less that all other nodes on the network such that the nodes are connected by one or more types of computer system relationships wherein the number of nodes identified in the partial view was determined in order to provide a determined probability of the message being sent to all nodes **(column 2, lines 26-27, column 3, lines 29-42; each node contains a dynamically formulated routing table of neighboring nodes, which are a portion of the network nodes).**

9. As per claim 2 Caram teaches the act of sending the message to the plurality of other nodes further comprises sending of the message to all nodes identified in the partial view **(column 2, lines 18-20).**

10. As per claim 3, Caram teaches each node in the network maintains a partial view **(column 3, lines 33-42).**

11. As per claim 4, Caram teaches the partial view comprises address information for at least one of the plurality of nodes comprising the partial view **(column 3, lines 33-42).**

12. As per claim 20, Caram teaches a computer system for disseminating information in a distributed network of nodes, each node comprising:

a receive component for receiving a broadcast message **(column 1, lines 15-16, column 2, lines 26-27);**

a storage component for storing information related to other nodes in a partial view, wherein the partial view is specific to each node and identifies any two or more but less that all other nodes independent of hierarchical relationships wherein the number of nodes identified in the partial view was determined in order to provide a determined probability of the message being sent to all nodes **(column 3, lines 32-42)**

a communication component for transmitting broadcast information to nodes indicated in the partial view **(column 2, lines 26-27, column 3, lines 29-42).**

13. As per claim 21, Caram teaches a partial view comprises address information for at least one other node **(column 3, lines 33-42).**

14. As per claim 22, Caram teaches a communication component is operable to transmit broadcast information to all nodes identified in the partial view **(column 3, lines 33-42).**

15. As per claim 23, Caram teaches the computer system is part of a distributed network of computer systems and wherein other computer systems in the network maintain a partial view of the entire network **(column 2, lines 3-23),**

16. As per claim 24, Caram teaches a network of nodes having the ability to communicate information between said nodes, said network comprising:

an application-based broadcast protocol using a gossip-based algorithm **(column 1, lines 15-16, column 4, lines 30-31; here a node broadcasts a received broadcast message to other nodes using the routing table. This is gossip based algorithm as defined in paragraph [0004] of the Applicant's specification, which explains that gossip based algorithm is the distribution of a new message to other nodes.)**

each node maintains a partial view of the entire network such that partial view identifies any two or more but less than all other nodes on the network such that the nodes are connected by one or more types of computer system relationships **(fig 1, 4)**, wherein number of nodes identified in the partial view was determined in order to provide a determined probability of a message being sent to all nodes **(column 3, lines 31-39)** and

each node gossips only to other nodes identified in each node's partial view **(column 2, lines 24-33).**

17. As per claim 25, Caram teaches a computer readable medium having stored thereon a data structure comprising:

a first identification field for storing address location information for a node in a network environment, a second identification field for storing address location information for another node in a network environment, wherein the first and second identification fields represent a partial view of the network environment; and wherein the data structure is used for a gossip-based communication between the nodes in the network **(Figures 5-6).**

18. As per claim 26, Caram teaches a plurality of additional identification fields, each field identifying address information for additional subscribed nodes in the network but less than all other nodes in the network **(Figures 5-6).**

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caram in view of Minyard (US Patent No. 6,779,038).

21. As per claims 5 and 6, Caram teaches that a node received a broadcast message only once **(column 2, lines 24-26)** and also teaches that messages can be discarded **(column 4, line 62)** but fails to *explicitly* teach storing identification information related to the received message to enable the determination of whether the message has been previously received, determining whether the received message has been previously received; and if the message has been previously received, then the message is not sent to any other node identified in the partial view.

However, Minyard teaches a method of determining if a message has been previously received by comparing each previously received message in a queue to determine if there is a match. If it is determined that the message has been previously received, the message is discarded. **(See Fig. 3, elements 306 and 312, column 4, line 55-column 5, line 4).** It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to combine the teachings of Caram and Minyard because doing so would provide a method of discarding duplicate broadcast messages received at a node in order to avoid send messages already sent by the node to minimize inefficient use of the network bandwidth.

22. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caram in view of Kawano et al (US Patent No. 5,594,872).

23. As per claim 7, Caram teaches determines whether to send a message or not **(column 2, lines 25-45)** but fails to teach determining whether the message is a broadcast-type message.

However, Kawano et al teach determining whether a message is intended for itself, a group of the processing units or an address set for broadcast. **(See column 8, lines 15-19)** It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to combine the teachings of Caram and Kawano et al because doing so would allow a node to determine if a message received by a node is intended for itself or for broadcasting to other nodes thereby preventing the broadcasting of a message intended for itself.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMSEY REFAI whose telephone number is (571)272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan Zeender can be reached on (571) 272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramsey Refai
February 28, 2008
/R. R. /
Examiner, Art Unit 3627

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